

10/528184

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Substitute for form 1449A/B/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Frank K. Crundwell
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	04634/0202648-USO

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
<i>mm</i>	AA**	US-5,030,279-B1	07-09-1991	Krauth	
<i>mm</i>	AB**	US-6,207,443-B1	03-27-2001	King	
<i>mm</i>	AC**	US-6,110,253-B1	08-29-2000	Kohr et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. **Pursuant to the Notice issued by the United States Patent and Trademark Office dated July 11, 2003 waiving the requirements of 37 C.F.R. § 1.98(a)(2)(i), a copy of the United States Patent on PTO/SB08 is not submitted. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					T ²
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
<i>mm</i>	CA	C.L. Brierley, "Bacterial succession in bioheap leaching", Hydrometallurgy 59 (2001), pp. 249-255.			
	CB	G. Zarate, et al., "The metallurgy of the Mantoverde Project", Hydrometallurgy 39 (1995) 307-319.			
	CC	F.A. MacLeod et al., "Plugging of a Model Rock System by Using Starved Bacteria", Applied and Environmental Microbiology, June 1988, pp. 3365-1372.			
<i>mm</i>	CD	David G. Dixon, "Analysis of heat conservation during copper sulphide heap leaching", Hydrometallurgy 58 (2000) pp. 27-41.			

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Examiner Signature	<i>Ima McGuffey</i>	Date Considered	4 Jan 08
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				Application Number	10/528,184
				Filing Date	May 31, 2005
				First Named Inventor	Frank Kenneth Crundwell
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	04634/0202648-US0

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		Number-Kind Code ² (if known)			
<i>mm</i>	AA*	US-6,383,458	05-07-2002	Brierley et al.	
<i>mm</i>	AB*	US-5,174,378	12-29-1992	Costerton et al.	
<i>mm</i>	AC*	US-5,873,927	02-23-1999	Schaffner et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Country Code ² -Number ⁴ -Kind Code ⁵ (if known)				
mm	BA	AU-199060837	02-14-1991			

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mm	CA	MUNOZ J A et al.: "A study of hte bioleaching of a Spanish uranium ore. Part I: A review of the bacterial leaching in the treatment of uranium ores"; HYDROMETALLURGY, ELSEVIER SCIENTIFIC PUBLISHING CY, AMSTERDAM, NL, vol. 38, no. 1, 1 May 1995, pages 39-57, XP004040764, ISSN: 0304-386X.			
mm	CB	Muir, L. and Brierley, J. The use of large scale test facilities in studies of the role of microorganisms in commercial leaching operations. Metallurgical Applications of bacterial leaching and related microbiological phenomena. L. Murr, A. Torma and J. Brierley. NewYork, Academic Press:491-520, 1978.			
mm	CC	Boon, M. and J.J Heijen. Gas-liquid mass transfer phenomena in bio-oxidation experiments of sulphide minerals. Hydrometallurgy 48(2):187-204, 1998.			
mm	CD	Cathles, L.M. and Apps, J.A. A model of the dump leaching process that incorporates oxygen balance, heat balance, and air convection. Metallurgical Trans. Vol 6B pp 617- 624, 1975			
mm	CE	Ammou-Chokroum, M., P. Sen, et al. Electrooxidation of chalcopyrite in acid chloride medium; kinetics, stoichiometry and reaction mechanism. Thirteenth international mineral processing congress, Warsaw, Poland Elsevier Polish Scientific Publishers, 1981			
mm	CF	Brierley, J. A. and C.L Brierley. Microbial mining using thermophilic organisms. Thermophiles: General. Molecular and Applied Microbiology. T. D. Brock. Golden, John Wiley & Sons:279-305, 1986.			
mm	CG	Muir, L. and Berry, V. Observations of a natural thermophilic microorganisms in the leaching of a large, experimental, copper-bearing waste body. Met.Trans. B 10B:523-531, 1979.			
mm	CH	Rossi, G. Biohydrometallurgy. McGraw-Hill 1990.			
mm	CI	Moreno, L. Martinez, J., Casas, J. Modelling of bioleaching copper sulphide in heaps or dumps, In: R. Arriola, A. Balliester editors, 16th International Biohydrometallurgy Symposium, IBS 99, pages 443-451, 1999.			

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Jan 4, 2007